

	CC	specifically during secondary cell deposition in lignin containing cells.
	CC	It can be used to modify the structure and cellulose content of plant
	CC	secondary cell walls and to produce altered plant phenotypes specific to
	CC	the needs of a particular industry such as in reducing the lignin of wood
	CC	pulp for paper manufacturing. A construct containing a cellulose synthase
	CC	promoter sequence and a gene of interest may be used in a method for the
	CC	production of the product of the gene of interest in a host cell that
	CC	produces lignin, where the product is produced only during secondary cell
	CC	wall synthesis. The present sequence represents a cellulose synthase
	CC	promoter which can be used in the invention for the production of
	CC	transgenic plants expressing an exogenous gene during secondary cell wall
	CC	deposition in cells containing lignin
SQ	Sequence	1749 BP; 551 A; 290 C; 354 G; 554 T; 0 U; 0 Other;
XX		
Query Match	19.8%;	Score 399.2; DB 4; Length 1749;
Best Local Similarity	77.8%;	Pred. No. 7,1e-92;
Matches 602;	Conservative 0;	Mismatches 123; Indels 49; Gaps 8;
Db	1257	CTGGAAAGCCTTACTGTTCTTCTATATGTGAAGCGCCGCCAACAACGTCCTCAAGAGGCTAACCGT 1316
	1	CTGGAGGCCCGAGTCACTCATATTGTGAAGTTCGCGMAAGCTCCAAGAGCGTTAACAT 60
QY	1317	CCGGTTCACAGTATGATGATGATCAAGTAATPACGTTTCAAGAGTGGAATPAGCTAGC 1376
Db	61	CCGGTTCACAGT---ATGATGATTAAGTAATPACGTTTCAAGAGTGGAATPAGCTAGC 117
QY	1377	GATTGGCAAAAACCGTGGGCTTCACGATCATCAGGAGTAGATTGAGCTTATTCACCAA 1436
Db	118	GATTGGCAAAAACCGTGGTTCAG---CATCAGGAGTAGATTGAGCTTATTCACCAA 174
QY	1437	CATCAAGAGAGATACATGATGTTATTAATCAATGAGAGAACTGCTTCGGAGAAGTCT 1496
Db	175	CACGAGAGAGATACGTTG--TTATTAACAATGAGAGAACTTGTCTACCGAAGTACT 231
QY	1497	AAGGCTTGTTCAAACAAGAGATGATCAACACCATTTCTTGAGCAACACGACAGACCTC 1556
Db	232	AAGGCTTGTTCAAACAAGAGAGAGAAACAACAACATCTTCTTGAGAACTCGGCCAGATAC 291
QY	1557	ATGACTAATATCATCATCAAAAGTTCTGTTTCGAGTATTCGGTATCTGTTTGGAGAA 1616
Db	292	ATGACTAATATGATCATCATCACTCACTCTGATATTTCTGTACCCTTTGTGSAAT 351
QY	1617	GTTGTGTGTTATGATGTTTCAAGGATTTGCAGCCC-----CGTTAACGTC 1664
Db	352	GTTGTGTGTTATGATGTTTCAAGGATTTGCAGATCCCTGTGGAACATCGGTTAATTAC 411
QY	1665	GATGACCTACCGTCTATAGTATGTTATTAACGACGAACATTTACTTGTGTCAG 1724
Db	412	GATGCCCTTACTGCTGTGAGATTTGCTTAACGACGAATTCATTTACTTATAGCTCAG 471
QY	1725	CAG-----CAGCAGACCCAGCAGTGGCCAGGTGGAATTTTTCCCGCGCAATGACG 1775
Db	472	CATCAGCAACAACAGCAGATTCAGCAGTGGCCGCGAGAGAAATTTCCGCGCGCAATTTGCG 531
QY	1776	AATAATGTTGGCTCTAATATGATTAACATGAGGAGAAAGTGTGAGAAAGTTGCTCCACA 1835
Db	532	AATAACATAGCTCTAACATGATCTTCAAGGGAGAGTGTGAGAAAGGGGCTCCACAGC 591
QY	1836	TTTACAGTTTGGAAACGACATTTGAAAAAATAGTTAAAGATCTTACTATATAGCGTGT 1895
Db	592	TTTTACAGTTTGGAAACGACATTTGAAAAAATAGTTAAAGATCTT-----TAGT 640
QY	1895	TGTGTGCTGTGAACAGTGTGATTAATCTTGAATGTTTCTTTCTCTCTTTCTTTT 1955
Db	641	TGTTTGTGTTGAATGTGGAACAGTTTGAATCTGTTTTCT-----TTTTCCTTTT 693
QY	1956	CTTGCTTAATTTCTTAAGATTTT-TTATGTTTCCATTAAGTTGATTAATTTT 2008
Db	694	TTGGGTAATTTCTTAATTAATCTTTTTCATAGTTTGATTTATTTGGATAAATTT 747

D1

## RESULT 13

ATT41339

LOCUS

DEFINITION

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

MEDLINE

PUBMED

REFERENCE

AUTHORS

TITLE

JOURNAL

FEATURES

source

ATT41339 1905 bp mRNA linear PLN 23-OCT-1996

Arabidopsis thaliana ANT (AINTEGUMENTA) mRNA, complete cds.

U41339.1 GI:1244707

Arabidopsis thaliana (thale cress)

Arabidopsis thaliana

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;

rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.

1 (bases 1 to 1905)

Elliot, R.C., Betzner, A.S., Hutner, E., Oakes, M.P., Tucker, W.Q.,

Gerentes, D., Perez, P. and Smyth, D.R.

AINTEGUMENTA, an APT2-like gene of Arabidopsis with pleiotropic

roles in ovule development and floral organ growth

Plant Cell 8 (2), 155-168 (1996)

96351414

8742707

2 (bases 1 to 1905)

Smyth, D.R.

Direct Submission

Submitted (27-NOV-1995) David Smyth, Genetics and Dev. Biology,

Monash University, Wellington Road, Clayton, VIC 3168, Australia

Location/Qualifiers

1. 1905

/organism="Arabidopsis thaliana"

/mol\_type="mRNA"

/strain="landeberg erecta"

/db\_xref="taxon:3702"

